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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,922	01/28/2002	Patrick L. Connor	P 249727 P12819	1480
27496	7590	03/25/2005	EXAMINER	
PILLSBURY WINTHROP LLP			NGUYEN, PHUOC H	
725 S. FIGUEROA STREET			ART UNIT	
SUITE 2800			PAPER NUMBER	
LOS ANGELES, CA 90017			2143	

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/055,922		CONNOR ET AL.	
	Examiner		Art Unit	
	Phuoc H. Nguyen		2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-24 rejected under 35 U.S.C. 102(b) as being anticipated by Reid et al.
(Hereafter, Reid) U.S. Patent 6,115,776.

3. Regarding claims 1,9, and 17, Reid discloses receiving at least one packet (eg. 72a receiving packets; col. 2 lines 40-53); issuing a receive interrupt with a delay, the delay being determined based on backlog information on a host, to inform the host about the received packets (Abstract; col. 4 lines 18-21); processing, upon receiving the receive interrupt, the received packets (eg. Figure 3; col. 3 lines 45-55).

4. Regarding claims 2,5,18, and 21, Reid further discloses determining the delay based on the backlog information gathered according to number of the processed packets that are returned from the host (col. 4 lines 18-21); asserting the delay (col. 3 lines 24-35); generating the receive interrupt, after the delay is asserted and sending the receive interrupt to the host (col. 4 lines 18-21).

Art Unit: 2143

5. Regarding claims 3, and 19, Reid further discloses populating the at least one packet, after said receiving, into a packet buffer (col. 4 lines 11-14); and sending the received packets in the packet buffer to the host for said processing (col. 3 lines 45-65).
6. Regarding claims 4 and 20, Reid discloses receiving at least one packet (eg. 72a receiving packets; col. 2 lines 40-53); populating the at least one packet into a packet buffer (col. 4 lines 11-14); issuing a receive interrupt with a delay, determined based on backlog information on a host, to inform the host about the received packets (Abstract; col. 4 lines 18-21); and sending the received packets to the host (col. 3 lines 45-65).
7. Regarding claims 6, and 22, Reid further discloses determining a backlog zone using the backlog information and computing the delay based on a delay function for the backlog zone (Abstract; col. 4 lines 18-21; and col. 8 lines 47-61).
8. Regarding claims 7, and 23, Reid further discloses a constant function with a constant pre-determined according to the backlog zone (col. 4 lines 18-21; and col. 8 lines 47-61).
9. Regarding claims 8,16, and 24, Reid further discloses allocating the packet buffer prior to said receiving, and populating the at least one packet into the packet buffer prior to said sending the received packets to the host (col. 7 lines 50-64; and col. 8 lines 47-61).
10. Regarding claims 10, and 14, Reid further discloses a packet receiver for intercepting the packets, a packet buffer for storing the received packets (col. 2 lines 40-53); and a backlog based interrupting mechanism for generating the receive interrupt, after the packets are populated in the packet buffer, based on the backlog information (col. 4 lines 18-21; and col. 8 lines 47-61).
11. Regarding claims 11, and 15, Reid further discloses a delay determination mechanism for computing the appropriate delay based on the backlog information (eg. counting number of

Art Unit: 2143

processed packets by host; col. 4 lines 18-21, and col. 8 lines 47-61); and an interrupt generation mechanism for generating the receive interrupt with the appropriate delay and for sending the receive interrupt and the received packets to the host (col. 3 lines 27-35).

12. Regarding claim 12, Reid further discloses an interrupt handler for intercepting and processing the receive interrupt, and a protocol stack with at least one layer for handling the received packets at appropriate layers (col. 3 lines 47-53).

13. Regarding claim 13, Reid a packet processing mechanism for processing the received packets (Figure 3, 72a in adaptor controller 112); and a packet return mechanism for returning processed packets to the input and output controller (Figure 3, 72a through adaptor controller 112).

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ecclesine U.S. Patent 5,983,275

Govindaraju et al. U.S. Patent 6,012,121

Walsh U.S. Patent 5,613,129

Johnson et al. U.S. Patent 6,754,755

Dunlap et al. U.S. Patent 6,633,941

Ghaffari et al. U.S. Patent 5,931,920

Fischer et al. U.S. Patent 5,533,203

Dunlap et al. U.S. Patent 6,760,799

Connor U.S. Patent 6,868,466


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuoc H. Nguyen whose telephone number is 571-272-3919. The examiner can normally be reached on Mon -Thu (7AM-4: 30PM) and off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuoc H. Nguyen
Examiner
Art Unit 2143

March 17, 2005


DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100